

## REMARKS

### Introduction

Claims 1-5, 12, 14-21, 25-29, 31-34, and 36 are currently pending in the application. In the Office action mailed May 13, 2008, the seventh Office action issued in this application, all of the pending claims are rejected under 35 U.S.C. §103(a) as obvious over proposed combinations that include US4470784 to Piotrovsky with US3350812 to Lindsay and US2129421 to Hales. As discussed in more detail below, about most of the pending claims are rejected over the Piotrovsky-Lindsay-Hales combination further combined with additional references, resulting in 4- and 5-reference combinations that are asserted to be "obvious."

Applicant respectfully traverses the rejections of the pending claims. In this response, the remarks below again demonstrate, as has been demonstrated previously, that the pending claims are clearly allowable over the cited art of record.

In view of the remarks below, Applicant respectfully requests reconsideration of the application under 37 C.F.R. § 1.111 and allowance of the pending claims.

### Rejections of claims 1-5, 12, and 14-15

Independent claim 1, and its dependent claims 2-5, 12, and 14-15, are rejected as being unpatentable over a four-way proposed combination of Piotrovsky, Lindsay, Hales, as mentioned above, with US2174932 to Weis.

Claim 1 recites a high-volume insert for an injection-molded toy figure.

The Office action asserts that:

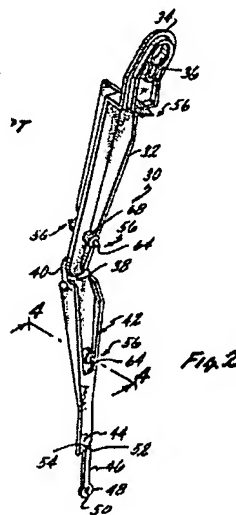
- Piotrovsky discloses a hollow body portion that will form an inner supporting structure of a toy figure appendage, with a cylindrical boss attached to a tab (page 2);
- Lindsay discloses an enclosed tubular body portion to maintain a space (page 3);

- Hales discloses a hollow tubular member (page 3); and
- Weis discloses a frustoconical insert (page 4).

The Office action also asserts that it would be obvious to have a portion of the Piotrovsky insert be a tubular body portion as disclosed by Lindsay because "such a modification would have involved a mere change in the shape of the insert" (page 3); to make the insert hollow as disclosed by Hales because "hollow insert members [are] art recognized equivalent[s]" (pages 3-4); to make the hollow insert frustoconical as disclosed by Weis because such a modification is "an art-recognized equivalent" and that "changes in shape are ... within the level of ordinary skill in the art" (page 4); and that it would have been obvious to modify the insert to occupy at least 50% of a volume of the associated portion of the appendage because "changes in size are ... within the level of ordinary skill in the art" (page 5).

Applicant respectfully disagrees that the cited references disclose the subject matter asserted in the Office action, and that the combination of the references would have been obvious.

Preliminarily, it is quite readily apparent from a cursory view of Fig. 2 of Piotrovsky, cited in the Office action, that the insert disclosed is not hollow, but is instead *solid*:



Indeed, Piotrovsky discloses a *solid, low-volume* insert, a type of insert that is discussed in the current application in paragraph [0006] (part of the “Background” section), which occupies only a relatively small fraction of the volume of the surrounding limb. As exemplified by the example shown above, low-volume inserts are described in the application as often including an elongate, substantially flat segment reinforced with one or more thin ridges protruding orthogonally from the flat segment, such that a low-volume insert has a substantially X- or T-shaped cross-section (*Id.*).

The Office action asserts, however, that the Piotrovsky insert is hollow.

More particularly, the Office action asserts that the Piotrovsky insert is has “a cavity or space therein,” but such a cavity or space is not apparent in Fig. 2, cited by the Examiner in support.

However, the Office action on page 3 then concedes that Piotrovsky does *not* disclose a body portion configured to maintain a hollow space.

Applicant notes that throughout the specification, the word “hollow” describes that the insert has an interior, enclosed gap or cavity, for example as shown in Fig. 4, which shows a portion of a doll leg insert. Moreover, in Applicant’s “Response to Office Action” dated September 12, 2007, Applicant attempted to clarify the use of the term as indicating an interior, enclosed gap or cavity by amending claim 1 to recite, in part, that the body portion is configured to “*maintain* a hollow space.” Applicant herein attempts to further clarify that “hollow” indicates this meaning by amending claim 1 to recite, in part, that the body portion is configured to “*define* a hollow, *interior* space.” In the event that the Examiner is construing the word “hollow” to have a particular meaning other than as indicated throughout the application, Applicant notes that neither the Office action, the cited references, nor Applicant’s disclosure

supports a construction of the term “hollow” other than that indicated above.

In light of the consistent use of the term in Applicant’s disclosure, when referring to the insert, to indicate an interior, enclosed gap or cavity, Applicant’s characterization of the prior art as “low-volume” (to distinguish from Applicant’s “high-volume” hollow inserts), and Applicant’s amendment to claim 1, Applicant submits that Piotrovsky fails to disclose a hollow body portion.

Lindsay is asserted on page 3 to disclose an “enclosed tubular body portion for maintaining a space within an appendage of a toy figure being attached to a boss member.”

Despite there being no indication in the Office action as to what part of the Lindsay reference is asserted to be a boss member, Applicant notes that none of the pending claims actually recite this subject matter.

Moreover, Applicant notes that the Lindsay inserts are solid, as shown in Figs. 4 and 5 of the Lindsay reference. As such, the Lindsay insert does not maintain a hollow space, as recited in the claim. Indeed, the Office action concedes on page 3 that Lindsay fails to disclose a hollow insert.

The Lindsay insert is, however, disposed in an otherwise hollow leg-shaped covering 16 (see Lindsay Figs. 1, 2; 4:52-54). In other words, the Lindsay limb portions do not contain any interstitial or surrounding material between the internal insert 14 and the leg-shaped covering 16. The reason for this configuration is to allow the insert 14 to rotate freely about its longitudinal axis without interference from surrounding material (see Lindsay 4:33-34). In contrast, Piotrovsky discloses injection molding directly against internal skeletal limb members. The Piotrovsky inserts are provided with a pin and boss arrangement configured so that when material is insert molded around the skeletal members to form, for example, a doll limb, the pins

recess into their corresponding bosses so that the tips of the pins do not protrude from the exterior surface of the finished doll limb.

In other words, the skeletal inserts of the Piotrovsky reference are configured to be surrounded with material provided during an insert molding step.

As such, it is clear that the disclosures of Lindsay and Piotrovsky both *teach away* from any modification of one with the teachings of the other. Modifying Piotrovsky with the tubular inserts of Lindsay would either destroy the functionality of the inserts by preventing their free rotation relative to the external surface of the limb after being subjected to the insert molding step of Piotrovsky, or would render the pin and boss configuration of the Piotrovsky inserts useless if used without surrounding material in the finished limb. Either result indicates that such a modification cannot be considered to have been obvious. For this reason alone, any rejection based on the Lindsay-Piotrovsky combination is improper.

Further addressing the proposed combination asserted against claim 1, Hales is asserted on page 3 to disclose a doll “consisting of hollow tubular members.” The Office action then asserts that “Hales shows that hollow insert members would be an art recognized equivalent,” and concludes on this basis that it would have been obvious to modify Piotrovsky with a hollow insert member.

However, Hales does not show that a hollow insert member is an art recognized equivalent, either to the X-shaped cross-sectioned Piotrovsky inserts or to the solid tubular Lindsay inserts. As indicated clearly in the MPEP, “In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized *in the prior art*, and cannot be based on ... *the mere fact that the components at issue are functional or mechanical equivalents*” (MPEP 2144.06, citing *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958)).

In other words, the *prior art* must recognize the equivalence of the compared components; a mere assertion in an Office action is insufficient to establish equivalence in this context. Here, Hales (and the other cited art) do not recognize such an equivalence.

Nor could equivalence be recognized, because the components at issue are not even functional or mechanical equivalents to begin with. The configurations are structurally different (i.e., no *mechanical* equivalence between the Hales inserts and the Piotrovsky and Lindsay inserts), and the Hales inserts fulfill quite a different function (i.e., no *functional* equivalence between the Hales inserts and the Piotrovsky and Lindsay inserts). In particular, wherein the Piotrovsky inserts serve the function of allowing pins to recess into corresponding bosses during an insert molding step, and wherein the Lindsay inserts are machined as cylinders to allow rotation about their longitudinal axes, each insert in the Hales reference acts as a socket, holding one or more compression springs that bias a terminal washer against a ball on an adjacent insert (Hales page 1, right column, line 49 through page 2, left column, line 26; see also page 2, left column, lines 45-55). As such, not only does the prior art fail to establish the components being compared as recognized equivalence, but the prior art also fails to indicate that the components are mechanical or functional equivalents of each other. Indeed, Hales clearly shows that the components are both mechanically and functionally *different* than the inserts in the Piotrovsky and Lindsay references.

As such, and for at least this additional, independent reason, the rejection of claim 1 on this basis is improper and should be withdrawn, because no *prima facie* case of obviousness has been established. There is no rationale behind the proposed combination; indeed, the modification of Piotrovsky with the insert configuration of Hales would alter the principle of operation of the reference being modified, and as such cannot be considered to have been

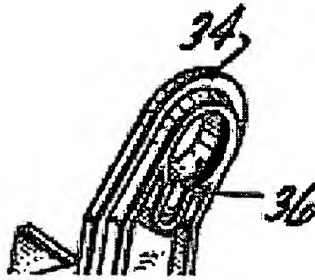
obvious.

Still addressing the proposed combination of Piotrovsky with Lindsay and Hales to reject claim 1, the claim also recites, in part, that the hollow interior space defined by the hollow body portion "occupies at least 50% of a volume of an associated portion of the appendage." With respect to this subject matter, the Office action on page 4 asserts as follows:

The examiner notes that it has been held that where the only difference between the prior art and the claimed device is a recitation of the relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art then the claimed device is not patentably distinct from the prior art. Furthermore, changes in size are generally recognized as being within the level of ordinary skill in the art and as such a modification on the size of the insert would be entirely obvious. See *In re Rose*, 220 F.2d 459, 105 USPQ 237 (GGPA 1955) and *Gardner v. TEG Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

This assertion is a rejection based on caselaw, but Applicant notes that the Office action does not satisfy the requirements of the test. For example, the Office action does not establish that the *only difference* between the prior art (i.e., Piotrovsky, Lindsay, and Hales) and the claimed device is a recitation of relative dimensions. As indicated above, there are *many differences*. For example, the claimed configuration is substantially different from that proposed by the several modifications asserted in the Office action, even assuming for the sake of argument that the proposed modifications are proper. However, as shown above, there is no motivation to even make the proposed modification asserted in the Office action to reach the claimed subject matter. As another example, the prior art does not disclose other elements recited in the claim; for example, the prior art does not disclose a substantially planar tab and a cylindrical boss protruding therefrom. The cited section of Piotrovsky asserted to disclose this subject matter only shows a tab (34) with a cylindrical boss (36) extending therethrough, and not protruding from the tab. This can be seen in Fig. 2 of the Piotrovsky reference, a detail portion

of which is reproduced below:



However, Applicant also notes that even assuming for the sake of this response that the Office action has established that the only difference between the prior art and the claimed device is a recitation of relative dimensions, this is only one of the two required showings under the test paraphrased in the Office action above. The other required showing is that *a device having the claimed relative dimensions would not perform differently than the prior art*. See, e.g., MPEP 2144.04. The Office action has not established this, and Applicant notes that a high-volume insert having the recited dimensions, such as that recited in claim 1, would certainly perform differently. For example, several differences are listed in the application as filed, on pages 4-5, and are indicated elsewhere throughout the specification.

Indeed, the application establishes the criticality of the hollow configuration and the particular claimed range, which renders it “inappropriate to rely solely on case law as the rationale to support and obviousness rejection,” as clearly set forth in MPEP 2144.04.

As such, for at least this additional, independent reason, the rejection of claim 1 is improper.

The Office action on page 5 also employs this argument based on caselaw—that changes in shape are within the level of ordinary skill in the art—in support of the assertion that it would be obvious to further modify the X-shaped cross section of the insert member of Piotrovsky or the tubular insert member of the Lindsay to be frustoconical, as shown in the Weis reference.



However, Applicant notes again that in this rejection, the Office action has not established the required showings under the test articulated in the *Gardner* case and restated in the MPEP.

The Office action further asserts that Weis discloses that hollow frustoconical cylinders were art-recognized equivalents, but again Applicant notes that the Examiner has not made the required showing that this is supported by the prior art, or even that the Weis inserts are mechanically or functionally equivalent to those disclosed in any of the other cited references.

The Weis inserts are open, tapered cylinders. But as noted previously by Applicant (for example in Applicant's Request for Reconsideration filed on May 2, 2007, in response to a rejection based on the Atwood reference, which also discloses hollow doll inserts), if the open inserts of Weis were subjected to the injection-molding process of Piotrovsky, material would flow inside and fill the inserts, defeating the purpose of having hollow inserts. As such, Weis fails to establish that open, hollow, frustoconical inserts are art-recognized equivalents of closed, solid, tubular inserts (as disclosed, for example, in Lindsay) or inserts having X-shaped cross-sections (as disclosed, for example, in Piotrovsky).

Regardless, it would certainly not be obvious to make the proposed modification of the (already impermissible) Piotrovsky-Lindsay-Hales combination to include the inserts of Weis. Because the open inserts of Weis would not remain hollow when subjected to the Piotrovsky injection molding process, it would not be obvious to modify Piotrovsky (nor would it be obvious to modify Piotrovsky to not include an injection molding process, as the pins of the Piotrovsky inserts would not recess into their respective bosses, rendering the structure not functional for its intended purpose. As such, Weis actually *teaches away* from making the proposed modification.

For any of these reasons, the proposed modification of the (already impermissible) Piotrovsky-Lindsay-Hales combination would not be obvious, and for at least this additional reason on its own, the rejection of claim 1 is improper and should be withdrawn.

As such, the comments above demonstrate that not only does the proposed prior art combination fail to disclose all of the subject matter recited in claim 1, but that several of the prior art combinations and asserted modifications are either improper, do not satisfy the tests set forth in caselaw and restated in the MPEP, and/or are contradicted by the very disclosures upon which the Office action relies because one or more of the references teach away from making the various modifications proposed. Accordingly, Applicant respectfully requests withdrawal of the rejection and allowance of claim 1.

Moreover, claims 2-5, 12, and 14-15 depend from claim 1 and should for at least this reason should also be allowed when claim 1 is allowed. These claims also recite additional subject matter not disclosed in any of the cited references. For example, dependent claim 12 recites, in part, that “a portion of the tab has a convex surface for supporting the cylindrical boss.” The Office action asserts that the Piotrovsky tab (34) has a convex surface, but does not address the “for supporting the cylindrical boss” subject matter of the claim. Indeed, because the structure construed in the Office action as the “cylindrical boss” is the opening 36 through the tab 34, the convex surface of the tab 34 cannot support the cylindrical boss. The cited references thus fail to disclose at least this subject matter.

As another example, dependent claim 15 recites, in part, that the engagement portions “each include a substantially semicircular exterior edge configured to rotate smoothly within an outer covering of the toy figure.” The Office action asserts that the Piotrovsky tab and opening each include a substantially semicircular edge configured as such, but Applicant notes that because the

the opening 36 through tab 34 is construed as the “boss,” the exterior edge of each is the *same* edge, and therefore Piotrovsky fails to disclose two engagement portions *each* including such an edge.

For at least these additional reasons, the rejections of dependent claims 12 and 15 should be withdrawn and the claims allowed.

**Rejections of claims 16-21**

Independent claim 16, and its dependent claims 17-21, are rejected as being unpatentable over a proposed combination of Piotrovsky with Lindsay and Hales.

Claim 16 recites a high-volume insert for a skeleton of an injection-molded doll comprising, in part, first and second segments that may be detachably joined to form therebetween a substantially hollow region.

The Office action asserts that:

- The asserted combination of Piotrovsky, Lindsay, and Hales discloses the basic inventive concept, with the exception of having first and second body segments (pages 5-6);
- It would have been an obvious matter of design choice to make the insert body of detachable segments, and to use hollow dowel and boss to attach the segments (page 6); and
- Changing the relative dimensions or size is within the level of ordinary skill in the art (page 6).

In other words, the Office action uses essentially the same language to assert the rejection of claim 16 as used in claim 1, with the exception of asserting that having a high-volume insert made of multiple segments, and the manner of attaching those segments, would be obvious design choices.

With regard to the asserted Piotrovsky-Lindsay-Hales combination, the Applicant has demonstrated above that the combination fails to disclose a hollow, high-volume insert, and has also shown several reasons why the proposed combination(s) cannot be considered to have been obvious. In particular, the remarks above demonstrate that: neither the Piotrovsky nor the Lindsay inserts are hollow; that both Piotrovsky and Lindsay teach away from any combination or modification of the disclosure of one with the teachings of the other; the prior art fails to show that the Hales inserts are recognized equivalents to the Piotrovsky or Lindsay inserts; making the Piotrovsky or Lindsay inserts hollow would, accordingly, not be obvious; the cited references teach away from making the Piotrovsky or Lindsay inserts hollow; and, with respect to the dimensions recited in dependent claims 17-20, the Office action fails to satisfy the “relative dimensions” test delineated in *Gardner* and restated in the MPEP. Applicant thus reiterates the remarks with respect to the Office action’s rejection of independent claim 16 and dependent claims 17-21.

As such, the comments above demonstrate that not only does the proposed prior art combination fail to disclose all of the subject matter recited in claim 16, but that several of the prior art combinations and asserted modifications are either improper, do not satisfy the tests set forth in caselaw and restated in the MPEP, and/or are contradicted by the very disclosures upon which the Office action relies because one or more of the references teach away from making the various modifications proposed. Accordingly, Applicant respectfully requests withdrawal of the rejection and allowance of claim 16. Moreover, claims 17-21 depend from claim 16 and recite additional subject matter, and for at least these additional reasons be allowed when claim 16 is allowed.

*Rejections of claims 25-29, 31-34 and 36*

Independent claims 25 and 31, and their dependent claims, are rejected as being unpatentable over a five-way proposed combination of Piotrovsky, Lindsay, Hales, and Weis, as mentioned above, with US3277601 of Ryan.

Claim 25 is directed to an injection-molded toy figure with an inner skeleton having a high-volume insert with a hollow body portion and engagement portions for engaging other parts of the inner skeleton. Claim 31 is directed to a high-volume insert for an injection-molded toy having a hollow body portion and an engagement portion to form a pivotable connection with another portion of the toy figure.

In a single paragraph on pages 7-8 of the Office action, the prior four-way combination of Piotrovsky, Lindsay, Hales, and Weis is asserted to disclose "the basic inventive concept" of all 10 claims, with the exception of an engagement portion as recited in the claims. Ryan is asserted to disclose an engagement portion, which the Office action asserts that it would be obvious to modify, and which the Office action also asserts that it would be obvious to incorporate into the Piotrovsky-Lindsay-Hales-Weis combination. The motivation given in the Office action is "in order for an upper limb portion and a lower limb portion to move relative to each other." However, this is not a motivation to combine references; it is a simple statement of the disclosure of Ryan.

Regardless, Applicant's remarks above have amply demonstrated that the Piotrovsky-Lindsay-Hales-Weis combination is improper on several grounds. Briefly, the Applicant has demonstrated above that the combination fails to disclose a hollow, high-volume insert, and has also shown several reasons why the proposed combination(s) cannot be considered to have been obvious. In particular, the remarks above demonstrate that: neither the Piotrovsky nor the

Lindsay inserts are hollow; both Piotrovsky and Lindsay teach away from any combination or modification of the disclosure of one with the teachings of the other; the prior art fails to show that the Hales inserts are recognized equivalents to the Piotrovsky or Lindsay inserts; making the Piotrovsky or Lindsay inserts hollow would not be obvious; the prior art fails to show that the Weis inserts are recognized equivalents to the Piotrovsky, Lindsay, or Hales inserts; making the Piotrovsky, Lindsay, or Hales inserts frustoconical would not be obvious; the Office action fails to satisfy the “relative dimensions” and “change in shape” tests delineated in the caselaw and restated in the MPEP; both Weis and Piotrovsky teach away from any combination or modification of the disclosure of one with the teachings of the other; and, with respect to the dimensions recited in dependent claims 26-29 and 32-33, the Office action fails to satisfy the “relative dimensions” test delineated in *Gardner* and restated in the MPEP.

As such, the comments above demonstrate that not only does the proposed prior art combination fail to disclose all of the subject matter recited in independent claims 25 or 31, but that several of the prior art combinations and asserted modifications are either improper, do not satisfy the tests set forth in caselaw and restated in the MPEP, and/or are contradicted by the very disclosures upon which the Office action relies because one or more of the references teach away from making the various modifications proposed. Accordingly, Applicant respectfully requests withdrawal of the rejection and allowance of independent claim 25 and 31. Moreover, claims 26-29 depend from claim 25, and claims 32-34 and 36 depend from claim 31, and all of the dependent claims recite additional subject matter, and should for at least these additional reasons be allowed when independent claims 25 and 31 are allowed.

**Conclusion**

For each claim above, any one of the aforementioned reasons on its own is sufficient to defeat the rejection. As such, it is abundantly clear that the subject matter of the claims are allowable over the six cited references, as well as over all of the previously cited references that have already been asserted against the claim in the *seven* Office actions issued in this application.

Indeed, in light of the lengthy prosecution history of this application, in which the rejections asserted against the pending claims have *repeatedly* been defeated, and in light of the MPEP's clear directive that prior art rejections should be strictly confined to the best available art (MPEP 706.02), Applicant respectfully submits that the patentability of the pending claims has unquestionably been established already and that further examination is neither necessary nor justified. Accordingly, Applicant requests that the rejections of the pending claims be withdrawn and the claims allowed.

Accordingly, Applicant respectfully requests that the Examiner issue a Notice of Allowance covering the pending claims. If any questions remain, or if a telephone interview would in any way advance prosecution of the application, the Examiner is invited to contact the undersigned attorney of record.

**CERTIFICATE OF ELECTRONIC  
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I hereby certify that this correspondence is being filed electronically via the EFS-Web system at [www.uspto.gov](http://www.uspto.gov) on November 11, 2008.

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Respectfully submitted,

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